



#5

## SEQUENCE LISTING

110 Cambridge University Technical Services

<120> A novel family of beta sub-unit proteins from a voltage gated sodium channel nucleic acids encoding them and therapeutic or diagnostic uses thereof

<130> 674558-2001

<140> 09/997,579

<141> 2001-10-15

<150> PCT/EP00/01783

<151> 2000-02-24

<150> 60,129,473

<151> 2000-02-24

<160> 47

<170> PatentIn version 3.1

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Thr Glu Ala Val Gln Gly Asn Pro Met Lys Leu Arg Cys Ile Ser Cys  
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Met Lys Arg Glu Glu Val Glu Ala Thr Thr Val Val Glu Trp Phe Tyr  
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Arg Pro Glu Gly Gly Lys Asp Phe Leu Ile Tyr Glu Tyr Arg Asn Gly  
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His Gln Glu Val Glu Ser Pro Phe Gln Gly Arg Leu Gln Trp Asn Gly  
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Ser Lys Asp Leu Gln Asp Val Ser Ile Thr Val Leu Asn Val Thr Leu  
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Asn Asp Ser Gly Leu Tyr Thr Cys Asn Val Ser Arg Glu Phe Glu Phe  
115 120 125

Glu Ala His Arg Pro Phe Val Lys Thr Thr Arg Leu Ile Pro Leu Arg  
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Val Thr Glu Glu Ala Gly Glu Asp Phe Thr Ser Val Val Ser Glu Ile  
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Met Met Tyr Ile Leu Leu Val Phe Leu Thr Leu Trp Leu Phe Ile Glu  
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Met Ile Tyr Cys Tyr Arg Lys Val Ser Lys Ala Glu Glu Ala Ala Gln  
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20 25 30

Thr Glu Ala Val Gln Gly Asn Pro Met Lys Leu Arg Cys Ile Ser Cys  
35 40 45

Met Lys Arg Glu Glu Val Glu Ala Thr Thr Val Val Glu Trp Phe Tyr  
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Arg Pro Glu Gly Gly Lys Asp Phe Leu Ile Tyr Glu Tyr Arg Asn Gly  
65 70 75 80

His Gln Glu Val Glu Ser Pro Phe Gln Gly Arg Leu Gln Trp Asn Gly  
85 90 95

Ser Lys Asp Leu Gln Asp Val Ser Ile Thr Val Leu Asn Val Thr Leu  
100 105 110

Asn Asp Ser Gly Leu Tyr Thr Cys Asn Val Ser Arg Glu Phe Glu Phe  
115 120 125

Glu Ala His Arg Pro Phe Val Lys Thr Thr Arg Leu Ile Pro Leu Arg  
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Val Thr Glu Glu Ala Gly Glu Asp Phe Thr Ser Val Val Ser Glu Ile  
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Met Met Tyr Ile Leu Leu Val Phe Leu Thr Leu Trp Leu Leu Ile Glu  
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Met Ile Tyr Cys Tyr Arg Lys Val Ser Lys Ala Glu Glu Ala Ala Gln  
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Ser Ala Val Pro Val Glu Glu  
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35 40 45

Met Lys Arg Glu Glu Val Glu Ala Thr Thr Val Val Glu Trp Phe Tyr  
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Arg Pro Glu Gly Gly Lys Asp Phe Leu Ile Tyr Glu Tyr Arg Asn Gly  
65 70 75 80

His Gln Glu Val Glu Ser Pro Phe Gln Gly Arg Leu Gln Trp Asn Gly  
85 90 95

Ser Lys Asp Leu Gln Asp Val Ser Ile Thr Val Leu Asn Val Thr Leu  
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Asn Asp Ser Gly Leu Tyr Thr Cys Asn Val Ser Arg Glu Phe Glu Phe  
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Thr Glu Ala Val Gln Gly Asn Pro Met Lys Leu Arg Cys Ile Ser Cys

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Met Lys Arg Glu Glu Val Glu Ala Thr Thr Val Val Glu Trp Phe Tyr  
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Arg Pro Glu Gly Gly Lys Asp Phe Leu Ile Tyr Glu Tyr Arg Asn Gly  
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His Gln Glu Val Glu Ser Pro Phe Gln Gly Arg Leu Gln Trp Asn Gly  
 85 90 95

Ser Lys Asp Leu Gln Asp Val Ser Ile Thr Val Leu Asn Val Thr Leu  
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Asn Asp Ser Gly Leu Tyr Thr Cys Asn Val Ser Arg Glu Phe Glu Phe  
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## hybridization experiments

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20 25 30

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35 40 45

Thr Thr Ala Glu Thr Phe Thr Glu Trp Thr Phe Arg Gln Lys Gly Thr  
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Glu Glu Phe Val Lys Ile Leu Arg Tyr Glu Asn Glu Val Leu Gln Leu  
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Glu Glu Asp Glu Arg Phe Glu Gly Arg Val Val Trp Asn Gly Ser Arg  
85 90 95

Gly Thr Lys Asp Leu Gln Asp Leu Ser Ile Phe Ile Thr Asn Val Thr  
100 105 110

Tyr Asn His Ser Gly Asp Tyr Glu Cys His Val Tyr Arg Leu Leu Phe  
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Phe Asp Asn Tyr Glu His Asn Thr Ser Val Val Lys Lys Ile His Leu  
130 135 140

Glu Val Val Asp Lys Ala Asn Arg Asp Met Ala Ser Ile Val Ser Glu  
145 150 155 160

Ile Met Met Tyr Val Leu Ile Val Val Leu Thr Ile Trp Leu Val Ala  
165 170 175

Glu Met Val Tyr Cys Tyr Lys Lys Ile Ala Ala Ala Thr Glu Ala Ala  
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Glu Asn Cys Thr Gly Val Gln Val Ala Glu  
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35 40 45

Ser Ile Phe His Tyr Ala Lys Gly Gln Pro Tyr Ile Asp Glu Val Gly  
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Thr Phe Lys Glu Arg Ile Gln Trp Val Gly Asp Pro Ser Trp Lys Asp  
65 70 75 80

Gly Ser Ile Val Ile His Asn Leu Asp Tyr Ser Asp Asn Gly Thr Phe  
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			20					25					30		

Glu Glu